WHAT IS CLAIMED:

1   1.   An apparatus for recording data about a system comprising:

2   a memory card comprising a supplemental file and a file storage section;

3   a processor unit operable to read from and write to the memory card; and

4   wherein the supplemental file of the memory card is read by the processor unit, the

5   supplemental file instructing the processor unit what data to save in the file storage section.

1   2.   The apparatus of claim 1 wherein the supplemental file of the memory card contains a

2   sequence of hexadecimal characters, the position and bit value of the hexadecimal characters

3   determining the information to record.

1   3.   The apparatus of claim 2 wherein a table defines the relationship between the sequence of

2   hexadecimal characters and the data to be recorded.

1   4.   The apparatus of claim 1 wherein the supplemental file contains instructions that causes the

2   processor unit to start and stop recording information when certain defined conditions are met.

1   5.   The apparatus of claim 4 wherein the certain defined conditions include aircraft altitude.

1   6.   The apparatus of claim 1 wherein the memory card is removeably inserted into a slot

2   containing a memory card reader/writer located on the processor unit.

1   7.   The apparatus of claim 1 wherein the memory card is a COMPACTFLASH card.

1   8.   The apparatus of claim 1 wherein the supplemental file contains instructions to change the

2   recording rate.

1   9.   The apparatus of claim 1 wherein the supplemental file contains instructions indicating the

2   data from which inputs and outputs of the processor units are to be recorded.

1   10.   The apparatus of claim 1 wherein the memory card is a solid-state memory card.

1   11.   The apparatus of claim 1 wherein the supplemental file is blank and a set of default

2   parameters are saved to the memory card.

1   12.   The apparatus of claim 11 wherein the set of default parameters are stored in an aircraft

2   specific database.

1   13.   A memory card for storing test data comprising:

2   a supplemental file section storing a supplemental file having instruction delineating the data

3   to be recorded; and

4   a file storage area for storing data based on the instructions in the supplemental file.

1   14.   The memory card of claim 13, wherein the supplemental file comprises a plurality of

2   hexadecimal characters, the position and bit value of the hexadecimal character determining the

3   data to be recorded.

1   15.   The memory card of claim 14 wherein a table defines the relationship between the sequence

2   of hexadecimal characters and the data to be recorded.

1   16.   The memory card of claim 13 wherein the memory card is a solid-state memory card.

1   17.   The memory card of claim 16 wherein the memory card is a COMPACTFLASH card.

1   18.   The memory card of claim 13 wherein the supplemental file contains instructions for starting

2   and stopping recording data when certain predefined conditions are met.

1   19.   The memory card of claim 13 wherein the supplemental file contains instructions for

2   changing the recording rate.

1   20.   The memory card of claim 13 wherein the supplemental file contains instructions for

2   overwriting the data stored in the file storage area.

1   21.   The memory card of claim 13 further comprising a header section having a configuration

2   file that indicates if the supplemental file is present.

1   22.   The memory card of claim 13 wherein the memory card is removeably insertable into a slot
2   on a processor.

1   23.   The memory card of claim 13 wherein the memory card is for use in an aircraft.

1   24.   A collision avoidance system for an aircraft comprising:
2   a collision avoidance processor unit having a plurality of data inputs and a plurality of data
3   outputs;
4   a memory device coupled to the collision avoidance processor unit; the memory device
5   operable to store data from the one or more of the plurality of inputs, one or more of the plurality of
6   outputs and data generated internally to the collision avoidance processor unit.

1   25.   The system of claim 24 wherein the memory device includes a supplemental file stored on
2   the memory device, the supplemental file read by the collision avoidance processor unit when the
3   memory device is communicatively coupled to the collision avoidance processor unit, the
4   supplemental file including instruction that indicate what data is to be recorded to the memory
5   device.

1   26.   The system of claim 25 wherein the supplemental file comprises a plurality of hexadecimal
2   characters, the position and binary bit value of the hexadecimal character indicating the parameters
3   to be recorded.

1   27.   The system of claim 26 wherein a table defines the relationship between the sequence of
2   hexadecimal characters and the data to be recorded.

1   28.   The system of claim 25 wherein the supplemental file contains instructions to start and
2   recording data when certain defined conditions are met.

1   29.   The system of claim 25 wherein the defined condition is aircraft altitude.

1   30.   The system of claim 25 wherein the memory device is removeably inserted into a slot
2   located on the collision avoidance processor unit.

1   31.   The system of claim 25 wherein the memory device is a COMPACTFLASH card.

1   32.   The system of claim 25 wherein the supplemental file contains instructions to change the

2   recording rate.

1   33.   The system of claim 25 wherein the memory card is a solid-state memory card.

1   34.   The system of claim 25 wherein a supplemental file is sent over a parallel or serial data

2   connection to a collision avoidance processor unit, the supplemental file including instruction that

3   indicate what data is to be recorded to the memory device

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1   35.   A method for recording data concerning a system comprising:

2   storing a supplemental file on a memory device, the supplemental file containing

3   instructions indicating the data to record;

4   coupling the memory device to a processor unit;

5   reading the supplemental file; and

6   storing the data to the memory device.

1   36.   The method of claim 35 wherein the step of storing a supplemental file further comprises:

2   storing a supplemental file comprises a plurality of hexadecimal characters, the position and bit

3   value of the hexadecimal character determining the parameters to be recorded.

1   37.   The method of claim 36 further comprising using a lookup table in conjunction with the

2   supplemental file to determine the data to be recorded.

1   38.   The method of claim 35 to wherein the step of storing a supplemental file further comprises

2   storing a supplemental file containing instructions to start and stop recording data when certain

3   defined conditions are met.

1   39.   The method of claim 38 wherein the defined condition is aircraft altitude.

1   40.   The method of claim 35 wherein the step of coupling the memory device further comprises

2   removeably inserting the memory device into a slot located on the processor unit.

1   41.   The method of claim 35 wherein the memory device is a COMPACTFLASH card.

1   42.   The method of claim 35 wherein the step of storing a supplemental file further comprises
2   storing a supplemental file containing instructions to change the recording rate.

1   43.   The method of claim 35 wherein the memory card is a solid-state memory card.